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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,856	08/22/2003	Hisham S. Abdel-Ghaffar	29250-000924/US	8128
7590 06/13/2005			EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			FOX, BRYAN J	
P.O. Box 8910			ART UNIT	
Reston, VA 20195			PAPER NUMBER	
			2686	

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/645,856	Applicant(s) ABDEL-GHAFFAR ET AL.	
	Examiner Bryan J Fox	Art Unit 2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 7, 9, 12, 13, 16 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Helander (US006728237B2).

Regarding **claim 7**, Helander discloses sending load status information in a cellular communication system periodically or upon the detection of a change in the load status or as a combination of both (see column 8, lines 47-61) and specifically if the load status change exceeds a given value (see column 10, lines 20-46), which reads on the claimed, "method of receiving cell load information in a wireless communication system, comprising: receiving the cell load information based on periodic events and threshold-driven events."

Regarding **claim 9**, Helander discloses that the load status information is sent if the load status change exceeds a given value (see column 10, lines 20-46), which reads on the claimed, "the threshold-driven events are determined based on one or more thresholds."

Regarding **claim 12**, Helander discloses that the load status information is sent if the load status change exceeds a given value (see column 10, lines 20-46), which reads on the claimed, "the one or more thresholds are adaptive depending on at least one of cell loading and cell service mix," wherein a threshold of change is the same as an adaptive threshold of loading based on cell loading.

Regarding **claim 13**, Helander discloses that the load status information is sent if the load status change exceeds a given value (see column 10, lines 20-46), which reads on the claimed, "the one or more thresholds are based on one or more consumption values," wherein a threshold of change is the same as an adaptive threshold of loading based on cell loading and cell loading reads on one or more consumption values.

Regarding **claim 16**, Helander discloses sending load status information in a cellular communication system periodically or upon the detection of a change in the load status or as a combination of both (see column 8, lines 47-61) and specifically if the load status change exceeds a given value (see column 10, lines 20-46), which reads on the claimed, "method of providing cell load information in a wireless communication system, comprising: providing the cell load information based on periodic events and threshold-driven events."

Regarding **claim 18**, Helander discloses that the load status information is sent if the load status change exceeds a given value (see column 10, lines 20-46), which reads on the claimed, "the threshold-driven events are determined based on one or more thresholds."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 4, 8, 10, 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helander (US006728237B2).

Regarding **claim 1**, Helander discloses sending load status information periodically in a cellular communication system (see column 8, lines 47-61), which reads on the claimed, "method of receiving cell load information in a wireless communication system." In another embodiment, Helander discloses that the load status information is "piggy-backed" on the payload messages (see column 9, lines 16-35) resulting in the higher the load, the more information about the load received (see column 9, line 61 – column 10, line 12).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the first embodiment of Helander such that the load information is received at a higher rate with a higher load in order to provide more up-to-date information as suggested by Helander (see column 10, lines 4-12).

Regarding **claim 4**, Helander discloses sending load status information periodically in a cellular communication system (see column 8, lines 47-61), which reads on the claimed, “method of receiving cell load information in a wireless communication system.” In another embodiment, Helander discloses that the load status information is “piggy-backed” on the payload messages (see column 9, lines 16-35) resulting in the higher the load, the more information about the load received (see column 9, line 61 – column 10, line 12).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the first embodiment of Helander such that the load information is received at a higher rate with a higher load in order to provide more up-to-date information as suggested by Helander (see column 10, lines 4-12).

Regarding **claim 8**, in another embodiment, Helander discloses that the load status information is “piggy-backed” on the payload messages (see column 9, lines 16-35) resulting in the higher the load, the more information about the load received (see column 9, line 61 – column 10, line 12).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the first embodiment of Helander such that the load information

is received at a higher rate with a higher load in order to provide more up-to-date information as suggested by Helander (see column 10, lines 4-12).

Regarding **claim 10**, in another embodiment, Helander discloses that the load status information is "piggy-backed" on the payload messages (see column 9, lines 16-35) resulting in the higher the load, the more information about the load received (see column 9, line 61 – column 10, line 12).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the first embodiment of Helander such that the load information is received at a higher rate with a higher load in order to provide more up-to-date information as suggested by Helander (see column 10, lines 4-12).

Regarding **claim 17**, in another embodiment, Helander discloses that the load status information is "piggy-backed" on the payload messages (see column 9, lines 16-35) resulting in the higher the load, the more information about the load received (see column 9, line 61 – column 10, line 12).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the first embodiment of Helander such that the load information is received at a higher rate with a higher load in order to provide more up-to-date information as suggested by Helander (see column 10, lines 4-12).

Regarding **claim 19**, in another embodiment, Helander discloses that the load status information is "piggy-backed" on the payload messages (see column 9, lines 16-35) resulting in the higher the load, the more information about the load received (see column 9, line 61 – column 10, line 12).

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It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the first embodiment of Helander such that the load information is received at a higher rate with a higher load in order to provide more up-to-date information as suggested by Helander (see column 10, lines 4-12).

Claims 2, 5 and 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Helander in view of Ahn (US 20020022487A1).

Regarding **claims 2, 5 and 11**, Helander fails to expressly disclose that the cell load information is provided on one of a dedicated channel and a shared channel.

In a similar field of endeavor, Ahn discloses receiving the load information over a common channel (see paragraph 91).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Helander with Ahn to include the above sending load information over the common channel in order to save system resources used by dedicated channels.

Claims 3, 6, 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helander in view of what was well known in the art (see MPEP 2144.03),

Regarding **claims 3, 6, 15 and 20**, Helander fails to disclose the use of a universal mobile telephone service system.

The examiner takes official notice that universal mobile telephone service was well known to a person of ordinary skill in the art at the time of the invention.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Helander for use with universal mobile telephone service in order to take advantage of the benefits of UMTS, such as higher capacity and data speeds.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over the applicants' admission of prior art.

Regarding **claim 14**, Helander fails to expressly disclose using dynamic bearer control.

The applicant discusses the use of dynamic bearer control in the background of the invention (see e.g. page 2, paragraph 4 – page 3, paragraph 6).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Helander with the applicants' admission of prior art to use the dynamic bearer control for generating consumption values in order to take advantage of the use of values that have already been computed indicating loading and avoid using the resources required to compute new values indicating loading.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Gandhi et al (US 20050026624A1) disclose a method of controlling overload over the reverse link.

Longoni (US 20020052206A1) discloses a cell load control method and system.

Hwang et al (US006414943B1) disclose a method and apparatus for controlling asymmetric dynamic radio bearers in mobile packet data communications system.

Farley et al (US 20040259564A1) disclose optimal load-based wireless session context transfer.

Muhonen et al (WO 02/089508 A1) disclose a telecommunication network having at least two network entities, and communication method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan J Fox whose telephone number is (571) 272-7908. The examiner can normally be reached on Monday through Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bryan Fox
May 24, 2005

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